

Full of Beans

Bean a botanist before?

Studying plants can become an interesting hobby for children and perhaps even inspire a few botanists of the future. Download this easy step-by-step guide to teach children how broad bean seeds grow. You can extend the activity to include drawing, measuring and keeping an illustrated diary of the development of the seeds... which could be handy for the back to school 'what you did this summer' class discussion.

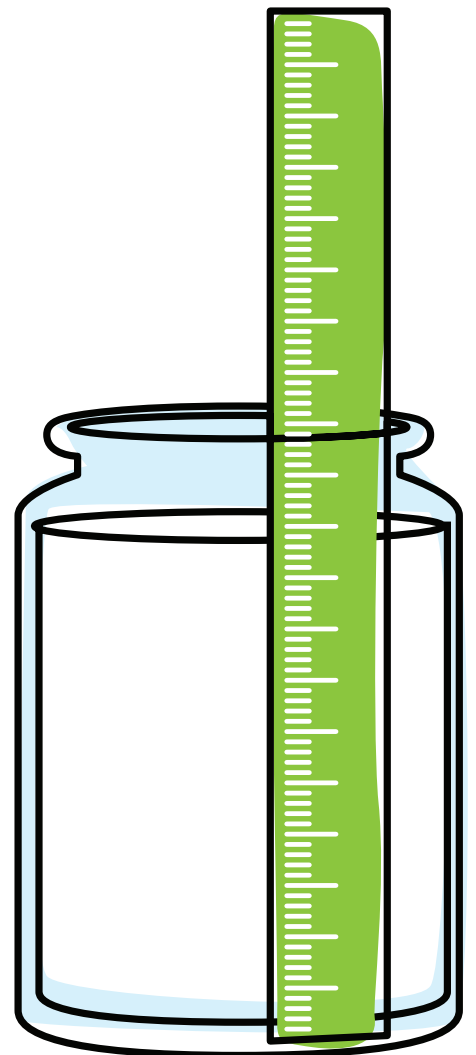
What you will need per child:

- A handful of broad beans
- 1 x tall, straight-sided glass jar
- Handfuls of seed compost
- Black paper
- Blotting paper

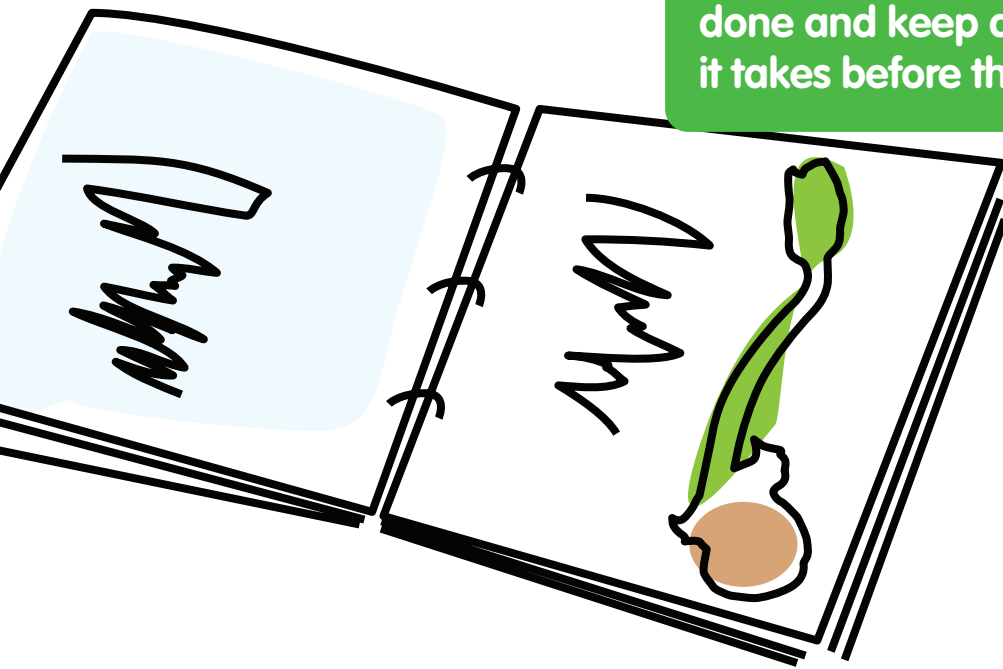


Bean to Plant and Back Again

- 1 Ask the children to make a roll of blotting paper and stand it inside the jar.
- 2 They can then fill the inside of the blotting paper cylinder with seed compost. Help them slide a ruler very gently between the glass and the blotting paper and then slide a broad bean about one third of the way down the jar (it should not be close to the bottom of the jar because you need to see the roots when they develop).
- 3 Repeat this exercise on the other side of the jar with a second bean.
- 4 Ask the children to pour a little water into the soil so that the blotting paper is moist, but be careful it needs to be damp not sodden.
- 5 Help the children wrap the jar with black paper, secure with elastic band and place the jar in a cupboard. The bean will then believe it is underground.
- 6 At regular intervals, check the bean and add a little water as necessary.
- 7 Once the first two leaves show, fully unfolded, remove the black paper and put the jar on a window sill. The plant can then enjoy some sun, but do avoid direct sunlight and make sure you keep it moist.



At this point you could perhaps ask the children to write or draw what they have done and keep a record of how many days it takes before the next stage takes place.



- 8 When the shoot is big and has several leaves plant it in a pot or in the garden and wait for flowers to appear. You will notice the flowers have a lovely fragrance and once outside it can attract the garden's insects. Ask the children to sniff the flowers and encourage them to keep an eye on the plant to see who comes to visit it. They can draw what they see and add more information to their diary.
- 9 When the flowers drop off shoots will appear, these are the beans.

